

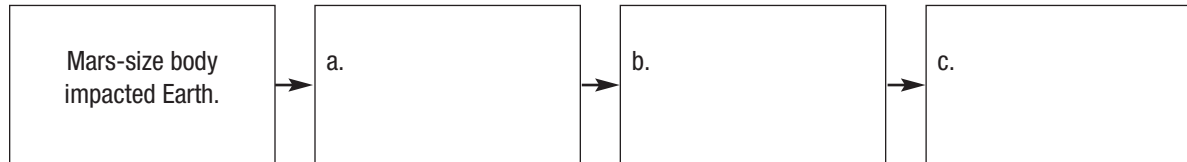
## Chapter 22 Origin of Modern Astronomy

**Section 22.3 Earth's Moon**

*This section describes the moon's structure, surface, and ideas about its origin.*

**Reading Strategy**

As you read, complete the flowchart showing the stages leading to the formation of the moon. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.



1. The density of the moon is comparable to that of mantle rocks on \_\_\_\_\_.

**The Lunar Surface**

*Match each description with its moon feature.*

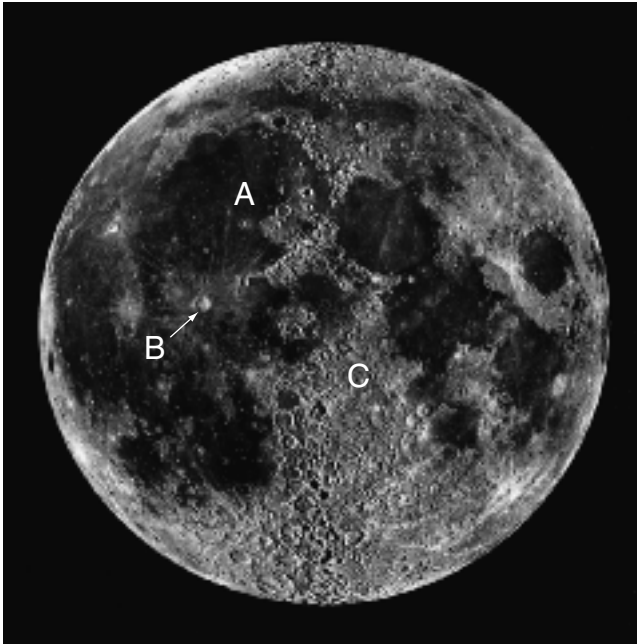
- | Description   | Moon Feature |
|---|--------------|
| _____ 2. densely pitted, light colored areas containing mountain ranges                   | a. regolith  |
| _____ 3.  dark, relatively smooth areas made of ancient beds of basaltic lava             | b. maria     |
| _____ 4.  splash marks that radiate outwards for hundreds of kilometers                   | c. craters   |
| _____ 5. long channels similar to valleys or trenches                                     | d. rays      |
| _____ 6. soil-like layer of igneous rock, glass beads, and fine lunar dust                | e. highlands |
| _____ 7.  round depressions produced by the impact of rapidly moving debris or meteoroids | f. rilles    |
| 8.  How did the maria on the moon's surface form? _____                                   |              |
| 9. Complete the table below.  |              |

Characteristic	Highlands	Maria
Color		dark
Surface texture		
Mountains present?		
Rilles present?		

## Chapter 22 Origin of Modern Astronomy

10. Select the appropriate letter in the figure that identifies each of the following moon features.

\_\_\_\_\_ crater          \_\_\_\_\_ highland          \_\_\_\_\_ mare



## Lunar History

11. 🌕 What is the most widely accepted theory of the moon's origin? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
12. The greater the density of craters on the moon, the \_\_\_\_\_ the surface must be.
13. List the three phases in which the moon evolved in order from oldest to youngest.  
 a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_
14. Is the following sentence true or false? Lava flows on the moon sometimes overlap highlands, showing that maria deposits are younger than highlands. \_\_\_\_\_
15. Why have very old craters on the moon not been erased as similar craters on Earth have been? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Chapter 22 Origin of Modern Astronomy

### WordWise

Use the clues below to identify vocabulary terms from Chapter 22. Write the terms, putting one letter in each blank. Use the circled letters to find the hidden word.

#### Clues

1. apparent westward drift of a planet as seen from Earth
2. an oval-shaped path
3. average distance between Earth and the sun
4. spinning of a body on its axis
5. motion of a body along a path around some point in space
6. point at which Earth is farthest from the sun
7. point at which the moon is farthest from Earth
8. cycle of changes in the amount of the moon that appears lit
9. splash mark radiating outward from a crater

#### Vocabulary Terms

1. \_ \_ \_ \_ \_ o \_ \_ \_ \_ \_
2. \_ \_ \_ \_ \_ o \_
3. \_ \_ \_ o \_ \_ \_ \_ \_ \_ \_ \_ \_ \_
4. o \_ \_ \_ \_ \_ \_ \_ \_
5. \_ \_ \_ \_ o \_ \_ \_ \_ \_
6. \_ \_ \_ \_ \_ \_ \_ \_ o
7. \_ \_ \_ o \_ \_ \_ \_
8. \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ o \_ \_ \_ \_
9. \_ \_ \_ o

Hidden Word: \_ \_ \_ \_ \_

Definition: \_\_\_\_\_